



General

Guideline Title

Allergic proctocolitis in the exclusively breastfed infant.

Bibliographic Source(s)

Academy of Breastfeeding Medicine. ABM clinical protocol #24: allergic proctocolitis in the exclusively breastfed infant. Breastfeed Med. 2011 Dec;6(6):435-40. PubMed

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

Definitions for the levels of evidence (I-III) are provided at the end of the "Major Recommendations" field.

- 1. If severe allergic proctocolitis is suspected based on any of the following:
 - Failure to thrive
 - Moderate to large amounts of blood in the stool with decreasing hemoglobin
 - Protein-losing enteropathy
 - i. The infant should be referred to a pediatric subspecialist (allergist or pediatric gastroenterologist) for diagnosis and treatment (III)
 - ii. While awaiting the appointment, begin an elimination diet in the mother, continuing her daily vitamins as suggested for all breastfeeding mothers and adding calcium supplementation (1,000 mg/day divided into several doses) (Vandenplas, et. al., 2007) (See Maternal Elimination Diet, in the original guideline document) (II-2).
 - iii. In the majority of patients, it is reasonable and safe to continue breastfeeding through the elimination process while awaiting the appointment and thus to protect breastfeeding. However, if the hemoglobin or albumin level is significantly low (based on age-dependent published norms), the use of a hypoallergenic formula may be considered (III).
- 2. If mild to moderate allergic proctocolitis is suspected based on the following:
 - Blood-positive stool or small amounts of visible blood in stool.
 - Weight gain and growth are normal.
 - Abdominal exam is benign; no abdominal distention or recurrent vomiting.
 - Stable hemoglobin and albumin levels (if measured).
 - i. The infant should continue breastfeeding. The mother should be started on an elimination diet, continue her daily vitamins as suggested for all breastfeeding mothers, and add calcium supplementation (1,000 mg/day divided into several doses) (Vandenplas, et. al., 2007)

(II-2).

- ii. The elimination diet trial for any given food or food group should be continued for a minimum of 2 weeks and up to 4 weeks. Most cases will improve within 72–96 hours (Lake, 1999) (II-2).
- 3. In cases of suspected mild to moderate allergic proctocolitis with improvement in response to maternal elimination diet:
 - Consider reintroducing the allergen back into the mother's diet (I).
 - If symptoms recur, the suspected food should be eliminated from the mother's (and infant's) diet until 9–12 months of age and for at least 6 months (Vandenplas, et. al., 2007; Lake, 2011; Bock, 1987) (II-2). Most babies/children will tolerate the offending allergen in the diet after 6 months "from the time of diagnosis" if at least 9 months old. For example, if a baby is diagnosed at 2 weeks, the food should be avoided until 9–12 months of age. If in the rare circumstance that a baby develops allergic colitis at 5–6 months of age, the caregivers should wait a full 6 months (after diagnosis) to re-introduce, therefore at least 12 months of age, not at 9 months of age, or until the mother decides to wean, whichever comes first (Vandenplas, et. al., 2007; Lake, 2011; Bock, 1987) (II-2).
- 4. In cases of suspected mild to moderate allergic proctocolitis with no improvement in response to maternal elimination diet:
 - Consider eliminating other allergens. (II-2).
 - Breastfeeding may continue with monitoring of weight gain and growth (II-2).
 - Consider following hemoglobin and albumin levels if continued moderate degree of blood loss (blood is visible) in stools (II-2).
 - Consider use of pancreatic enzymes for the mother. Dosage is generally one or two capsules with snacks and two to four with meals as needed, dependent on the baby's symptoms (see Use of Pancreatic Enzymes in the original guideline document) (Repucci, 1999; Schach & Haight, 2002) (III).
 - In severe cases with impaired growth, decreasing hemoglobin level, or decreasing serum albumin level, the use of a hypoallergenic formula may be considered; however, one should consider referral to a specialist (III).

Definitions:

Levels of Evidence

I Evidence obtained from at least one properly randomized controlled trial

- II-1 Evidence obtained from well-designed controlled trials without randomization
- II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group
- II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies and case reports; or reports of expert committees

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Allergic proctocolitis

Guideline Category

Evaluation

Management

Treatment

Allergy and Immunology Family Practice Gastroenterology Nursing Nutrition Obstetrics and Gynecology **Pediatrics Intended Users** Advanced Practice Nurses Allied Health Personnel Dietitians Nurses Physician Assistants Physicians Guideline Objective(s) • To explore the scientific basis, pathologic aspects, and clinical management of allergic proctocolitis in the breastfed infant as the condition is currently understood • To define needs for further research on allergic proctocolitis in the breastfed infant

Target Population

Clinical Specialty

Exclusively breastfed infants

Interventions and Practices Considered

Evaluation

- 1. Comprehensive family history and physical examination
- 2. Evaluation for additional symptoms of food-induced allergy
- 3. Accurate assessment of growth (weight and length gain), heart rate, and respiratory rate
- 4. Thorough abdominal examination
- 5. Inspection for perianal fissure or significant rash
- 6. Laboratory examinations, if indicated

Treatment/Management

- 1. Referral to a pediatric subspecialist
- 2. Elimination diet in the mother with continued use of vitamins and calcium
- 3. Continuation of breastfeeding
- 4. Continued assessment of hemoglobin and albumin levels if indicated

- 5. Consideration of pancreatic enzymes for mother
- 6. Use of a hypoallergenic formula in severe cases
- 7. Reintroduction of allergen

Major Outcomes Considered

- Symptoms of proctocolitis
- Improvement of symptoms
- Tolerance of reintroduced allergen

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

An initial search of relevant published articles written in English in the past 20 years in the fields of medicine, psychiatry, psychology, and basic biological science is undertaken for a particular topic. Once the articles are gathered, the papers are evaluated for scientific accuracy and significance.

For this clinical protocol, Medline/PubMed, Pre-Medline, and Ovid were searched for articles published from 1980 through 2011. The search terms included human milk, breast milk; breastfeeding; hypersensitivity; colitis; allergic colitis; eosinophilic colitis; gastrointestinal hemorrhage; cow milk protein allergy; milk hypersensitivity; milk and food hypersensitivity. Inclusion criteria included English language; humans; all infants birth to 23 months.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus (Committee)

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Levels of Evidence

I Evidence obtained from at least one properly randomized controlled trial

- II-1 Evidence obtained from well-designed controlled trials without randomization
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- III Opinions of respected authorities, based on clinical experience, descriptive studies and case reports; or reports of expert committees

Methods Used to Analyze the Evidence

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

An expert panel is identified and appointed to develop a draft protocol using evidence based methodology. An annotated bibliography (literature review), including salient gaps in the literature, are submitted by the expert panel to the Protocol Committee.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

The draft protocol is peer reviewed by individuals outside of contributing author/expert panel, including specific review for international applicability. The Protocol Committee's sub-group of international experts recommends appropriate international reviewers. The Chair and/or protocol resource person institutes and facilitates this process. Reviews are submitted to the committee Chair and resource person.

The contributing author/expert panel and/or designated members of protocol committee work to amend the protocol as needed.

The draft protocol is submitted to the Academy of Breastfeeding Medicine (ABM) Board for review and approval. Comments for revision will be accepted for three weeks following submission. The Chair, resource person and protocol contributor(s) amend the protocol as needed.

Following all revisions, the protocol has the final review by original contributor(s) to make final suggestions and ascertain whether to maintain contributing authorship.

The final protocol is submitted to the Board of Directors of ABM for approval. A two-thirds majority of Board members' positive vote is required for final approval.

Evidence Supporting the Recommendations

references supporting the recommendations

Bock SA. Prospective appraisal of complaints of adverse reactions to foods in children during the first 3 years of life. Pediatrics. 1987 May;79(5):683-8. PubMed

Lake AM. Dietary protein enterocolitis. Immunol Allergy Clin North Am. 1999;19:553-61.

Lake AM. Food protein-induced proctitis, enteropathy, and enterocolitis of infancy. In: UptoDate 3.1 2010 [accessed 2011 Oct 25].

Repucci A. Resolution of stool blood in breast-fed infants with maternal ingestion of pancreatic enzymes [abstract]. J Pediatr Gastroenterol Nutr. 1999;29:500A.

Schach B, Haight M. Colic and food allergy in the breastfed infant: is it possible for an exclusively breastfed infant to suffer from food allergy. J Hum Lact. 2002 Feb;18(1):50-2. PubMed

Vandenplas Y, Koletzko S, Isolauri E, Hill D, Oranje AP, Brueton M, Staiano A, Dupont C. Guidelines for the diagnosis and management of cow's milk protein allergy in infants. Arch Dis Child. 2007 Oct;92(10):902-8. [42 references] PubMed

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate evaluation and management of allergic proctocolitis in the exclusively breastfed infant

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

A central goal of The Academy of Breastfeeding Medicine is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient. These guidelines are not intended to be all-inclusive, but to provide a basic framework for physician education regarding breastfeeding.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2011 Dec

Guideline Developer(s)

Academy of Breastfeeding Medicine - Professional Association

Source(s) of Funding

Academy of Breastfeeding Medicine

Guideline Committee

Academy of Breastfeeding Medicine Protocol Committee

Composition of Group That Authored the Guideline

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